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AUTHOR Starrett, Richard A.; And Others
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ABSTRACT

The study examined the role played by informal (i.e., family, kin, neighbors, friends) and quasiformal (i.e., church-sponsored) support systems in predicting, enhancing, or inhibiting use of social services by Hispanic elderly. Thirty-seven variables and data selected from a 1979-1980 15-state survey of 1,805 noninstitutionalized Hispanic individuals aged 55 and over were categorized by the Andersen-Newman model of service use, which conceptualizes the individuals demand for services as a function of relationships among three factors: (1) predisposing (related to demographic, social, and belief characteristics); (2) enabling (related to availability and accessibility of community and family resources); and (3) need (related to perceived need and motivation). The path analysis method was used to ascertain relative importance and interrelationships of the variables. Knowledge of social services, perceived need for care, family income, self-rated health status, and ethnicity were found to be the most important determinants of social service use. Informal and quasiformal support systems affected use of services by contributing to the development of awareness of service availability and information about use, but took on differential levels of importance for various subgroups of the older Hispanic population. Problems for future research include examination of the types and sources as well as the frequency of support. References, path model diagrams and a zero order correlation matrix are appended. (LFL)

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THE SUPPORT SYSTEM OF THE HISPANIC ELDERLY

AND

THE USE OF FORMAL SOCIAL SERVICES*

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Richard A. Starrett[1]

Charles H. Mindel[2]

Roosevelt Wright, Jr.[3]

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*Paper presented at the 36th Annual Scientific Meeting of the Gerontology Society of America, San Francisco, CA, November 1983. The data for this study was originally collected by Carmela G. Lacayo, President of the National Association for Hispanic Elderly, Los Angeles, CA. The authors would like to gratefully acknowledge the assistance of Ms. Lacayo for making the data available for subsequent reanalysis and presentation.

[1]School of Social Work, Barry University, Miami Shores, Fl.

[2]Graduate School of Social Work, University of Texas at Arlington, Arlington, Tx.

[3]Graduate School of Social Work, University of Texas at Arlington, Arlington, Tx.

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Our knowledge regarding the process and complexities of the utilization of social services by the Hispanic elderly has been limited by the lack of available empirical information. Little is known for example, about the specific roles that the family, kinship and other support groups play in determining the use of formalized social services by this subgroup. Moreover, few studies have attempted to specify the interrelationships among variables used to explain variations in the use of social services. Apart from a few descriptive studies (Valle and Mendoza, 1978; Cuellar and Weeks, 1980, Lacayo, 1980), much of what is known about the use of social services by the Hispanic elderly is based upon subjective and anecdotal accounts. While these provide useful insights into the existential experience of social service utilization, they do not lend themselves to the development of the kinds of models that provide a clearer understanding of utilization as a dynamic process among the Hispanic elderly.

The purpose of the present study is to specify, and test, a causal model of social service utilization among the Hispanic elderly. Particular attention will be given to the role of the informal (i.e., family, kinship and friendship systems) and quasi-formal (i.e., church-sponsored senior citizens activities) support systems in accounting for differences in formal service use. Thus this study, unlike most existing studies, will be concerned with not only identifying correlates of utilization but also with investigating their interrelationships and identifying the causal factors involved in the utilization process. The utilization of service by the elderly in general, has been found to be partially determined by various socio-demographic factors (Kutner et al., 1956; Shanas, 1962; Shanas et al., 1968; McKinlay, 1972; Neugarten, 1974; McCaslin and Calvert, 1975; Downing, 1978; Mindel and Wright, 1982).

Several studies have found that social and psychological factors influence use (Coe & Wessen, 1965; Battistell, 1968; Fabrega & Roberts, 1972; Andersen and Newman, 1973; Bennett & Eckman, 1973; Harris, 1975; Lowry, 1979). Other more recent studies suggest that economic, community, geographic, organization, societal and environmental factors are related to use (Palmore, 1972; McKinlay, 1972; Andersen et al., 1972; Hammerman, 1974; Cutler, 1975; Cantor, 1975; Cantor and Mayer, 1976; Ward, 1977). More importantly, some studies suggest that the perception and intensity of needs, the knowledge of services and the availability and accessibility of formal and informal support systems are critical factors influencing use (Lipman & Sterne, 1969; Mechanic, 1962; Gaspard & Hopkins, 1967; McKinlay, 1972; German, 1975; Wright et al., 1979; Hess & Markson, 1980; Mindel and Wright, 1982). In addition, the importance of the kinship and friendship networks in providing help and support to the elderly is well documented (Shanas, 1967; McKinlay, 1972; Shanas, 1973; Hays and Mindel, 1973; Hill, 1972: Staples, 1976; Shanas, 1979; Cantor, 1979; Dowd & Bengtson, 1978; Mindel and Wright, 1982). Moreover, a number of studies have demonstrated the positive adaptive and supportive aspects of the Hispanic kinship network (Moore, 1970; Grebler et al., 1970; Keefe et al., 1979; Wagner and Schaffer, 1980; Mindel, 1980; Baca Zinn, 1981).

CONCEPTUAL FRAMEWORK

The large number of variables that are associated with utilization require a functional scheme sufficient for conceptually categorizing them. A sophisticated classification system was proposed by Andersen and Newman (1973) and latter modified by Ward (1977) for studying social services use among the elderly. This model conceptualizes the individual's demand for services as a function of a complex pattern of relationships among predisposing, enabling and need factors. It suggests that some individuals

are more predisposed to use services based on certain background characteristics such as; demographic, social structural, and beliefs (Predisposing Factor). Although, individuals may have differential propensities to use services, the use of such services is contingent on the availability and accessibility of community resources and the individuals family resources (Enabling Factor). Finally, assuming that the above conditions exist, the individual must recognize the presence of a need for services and be motivated to take some form of action before actual service use takes place (Need Factor). This framework will be employed to categorize the many variables used in this study and to analyze the overall process of social service utilization by the Hispanic elderly. The results should aid us in identifying and assessing: 1) the causes of differential use among the Hispanic elderly, 2) the role of the informal and quasi-formal support systems in determing use behavior, 3) the relative importance and magitude of the direct and indirect effects of the determinants of use, and 4) the amount of variation in use which can be explained by the hypothesized utilization model. Again, concern in this study is with the role that the informal and quasi-formal support sytems play in predicting use, and with how these systems operate to enhance or inhibit the use of formal social services by the Hispanic elderly.

METHODS

Data

This study represents a secondary analysis of a data set that was collected in 1979-80 entitled "A National Study to Assess The Service Needs of the Hispanic Elderly" (Principle Investigator, Carmela G. Lacayo). The data was provided by the National Association for Hispanic Elderly and were gathered from a national area probability sample of 1805 non-institutionalized hispanic

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individuals age 55 and over. The characteristics of the sample are: ethnic identity-Mexican American 59.3%, Puerto Rican 15.8%, Cuban 6.2%, and other Hispanics 18.8%; sexual composition - 48.6% males and 51.4% females; the mean age was 66.5; marital status-not married 47% and married 53%; mean education was five years; and mean income was $3,999. The original study data were obtained from cross sectional survey interviews administered in the home using a pretested instrument constructed by the National Association of Hispanic Elderly in consultation with the Administration of Older Americans (AOA), the United States Bureau of Census and Kaiser Permanente Research Department. The resulting instrument was a combination of the Older American Resources and Services Functional Assessment Questionnaire (OARS) and the Subjective Distress Scale of Psychiatric Status Schedule (PSS). Thirty-seven variables were selected from this data for the current study and classified according to Andersen and Newman framework, as shown in Figure 1.

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* Insert Figure 1 *

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Measurement.

Predisposing Factor: The demographic variables were measured as follows: Nativity was dichotomized,(United States=1, Other=0); U.S. citizen was dichotomized, (yes=1, no=0); Sex was dichotomized, (Male=1, Female=0); and age was measured by actual age. The social structural variables were measured as follows: Ethnicity was dummy coded, (Puerto Rican=1, Cuban=1, South/Central American=1, Mexican American=0); Education was measured by actual grade completed; Religion was dichotomized, (Catholic=1, Other=0);

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Functional literacy was measured on a scale ranging from 1 through 5 (Seldom=1, All the time=5) for speaking English at home and on a scale ranging from 1 through 3 (Very difficult=1, Not difficult at all=3) for the amount of difficulty with forms printed in English; Family size was measured by actual number of children; Residential stability was measured on a scale ranging from 0 through 5 (No other city=0, Five or more cities=5); Employment status was dummy coded (Wroking=1, Housewife=1, Retired=0); and Social economic status was measured using the United States Census Work Classification Code ranging from 0 through 100. The belief variables were measured as follows: Perceived Sex, Race and Age discrimination were each measured separately by summing the number of personal discrimination acts experienced by the respondent.

Enabling Factor: The community variables were measured as follows: Urban or Rural residence was dichotomized, (Urban=1, Rural=0); Age density was measured by the actual percentage of elderly residents in a census tract; Accessibility of transportation was measured by the actual number of blocks to the bus stop; Formal church attendance was measured on a scale ranging from 1 through 5 (Never=1, Very often=5); Contact with friends/neighbors was measured on a scale ranging from 0 through 4 (None=0, Everyday=4); and Perceived neighborhood cohesiveness was measured by summing the number of reasons a respondent does not move. The Cronbach's alpha reliability coefficient was .76, for this index. The family variables were measured as follows: Living arrangement was dichotomized for each variable separately (No one=1, Other=0) (Spouse=1, Other=0) Children=1, Other=0); Annual family income was measured on a scale ranging from 1 through 15 (0-499=1, 40,000-above=15); Contact with kin was measured separately for contact with children

and relatives on a scale ranging from 0 through 4 (None=0, Everyday=4); and Knowledge of formal social services was measured by summing the number of services out of 13 the respondent was aware of.

Need Factor: The need variables were measured as follows: Self rated health status was measured on a scale ranging from 1 through 5 (Very poor= 1, Very good=5); and Functional Ability was measured by summing the number of difficult daily living tasks out of 12 mentioned by the respondent. The Cronbach's alpha reliability coefficient was .87 for this index. Perceived need for formal social services was measured by summing the number of services needed out of 13 mentioned by the respondent.

Utilization: The utilization of social services was measured by summing the number of services used out of 13 mentioned by the respondent. The thirteen service categories were: education courses to prepare for retirement; local rides; home deliverd meals; meals at senior centers; assistance with housework; information about programs; legal aid; consumer education; food stamps; assistance with income tax; financial assistance for rent; financial assistance for medical care and recreational programs.

Method of Analysis

The method of analysis used to ascertain the relative importance and inter-relationship of the variables employed in the model was that of path analysis. In general, path analysis proceeds by solving a series of recursive regression equations in which each of the previously independent variables becomes the dependent variable in the next equation. The results indicate how much of the original correlation between the dependent and independent variables is accounted for by direct, indirect and unexplained effects while at the same

time controlling for the effects of all other variables in the equation (Kerlinger & Pedhazur, 1973; Schumm, et al., 1980; Nie et al., 1975). These results are then placed on a path diagram to visually illustrate the pattern of relationships within the model.

FINDINGS

The zero order correlation coefficients, means and standard deviations for the variables used in the study are shown in Table 1. The basic causal model of utilization and the variables included in this study are presented in Figure 1. The basic model was transformed into a series of structural equation from which standardized partial regression coefficients (path coefficients) were estimated. The resulting path diagram presented in Figure 2 is the end product of this process. An examination of the refined path diagram indicates that, in general, the need for care and enabling variables are the most important determinants of use whereas the predisposing variables take on a lesser important predictive role. Not all of the orginal thrity-seven variables in Table 1 are included in the path diagram, nor are all paths between variables so illustrated. Due to the large sample size it was felt that traditional significance tests, either on the Beta weight or on the increment of additional explained variance, would produce numerous paths that were statistically significant but superfulous or meaningless. In the interest of scientific parsimony only path coefficient that were both statistically significant at better than .05 level and explained at least 1% of the variance were retained in the path model (Mindel and Wright, 1982).

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Insert Table 1

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Insert Table 1

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The findings indicate that only five of the thirty-seven variables used in the study directly effect the utilization of social services. These five variables, knowledge of social services (enabling), perceived need for social services (need), annual family income (enabling), self-rated health status (need), and ethnicity (predisposing) jointly account for 35% of the variance in service use. The thirty-two remaining variables jointly account for 4% of the variance and none of them had a direct impact on service use. Additionally, knowledge of formal social services had the strongest direct effect on use (Beta=.45) and had no indirect effects. The greater the older person's knowledge of social services the greater their inclination to use services independent of their need for such services (the low correlation (r=.01) between knowledge of social services and need for services confirms the relative independence of these measures).

With respect to those variables that are conceptualized as indicators of the informal social support system of the elderly (e.g. contact with children, contact with relatives, contact with friends/neighbors and living arrangements) and the variable viewed as a component of the quasi-formal social support system (e.g. participation in senior citizens activities at church), none had significant direct effects on utilization. The variables contact with children and living with children had no significant paths to utilization, either direct or indirect, and was subsequently dropped from the path diagram. However, the remianing informal and quasi-formal system variables (i.e., contact with relatives, contact with friends/neighbors,

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living arrangements-living alone or with spouse, and participation in senior citizens activities at church) effected service use indirectly, primarily through their influence on annual family income and knowledge of social services (see figure 2).

The living with spouse variable indirectly effected use through its influences on income and the need for care variables. Living with spouse was directly effected by sex (Beta=.38), age (Beta=-.18), social economic status (Beta=.04), functional literacy (i.e., ability to read forms in English, Beta=.09), employment status (housewife Beta=.06, working Beta=.01) and ethnicity (Puerto Rican Beta=-.11, Cuban Beta=.08, Central/South American Beta=-.06).

The living alone variable indirectly effected use through its influence on knowledge and income. However, the indirect effect of living alone on income is spurious in nature and can not be meaningfully interpreted within this model. Living alone was directly effected by contact with friends and neighbors (Beta=.01). The contact with relatives variable indirectly effected use through its influence on knowledge. Contact with relatives was directly effected U.S. citizenship (Beta=.10) and contact with friends/neighbors (Beta=.33). The participation in senior citizens church activities variable indirectly effected use through its influence on knowledge. Participation in senior citizens church activities was not significantly effected by any of the other variables in the model. Moreover, the correlation between church attendance and participation in senior church activities (r=.23) was not analyzed within this model.

DISCUSSION

The findings from this study indicate that the informal support system indicators (i.e., contact with relatives other than children, contact with

friends and neighbors and living arrangements) and the quasi-formal support system indicator (i.e., participation in senior citizens activities at church) are significant predictors of social service utilization vis-a-vis their direct influence on other important variables in the model. That is, they have significant indirect effects but, in and of themselves, do not directly effect the criterion variable. The effects of the social support system variables are mediated through the older person's income and knowledge of formal social services. Knowledge of social services and income, in turn, directly predict differential utilization within the model. Presumably, those older Hispanics who live alone, who visit frequently with their kin (excluding children), friends and neighbors, and who regularly participate in senior citizen activities at church, are those most likely to possess greater awareness (knowledge) of available formalized social services which can aid them in times of need. As a result, this group is much more likely to judiciously use these services in comparison to groups with contrasting characteristics. That is, those elderly who are living with their spouses, visit infrequently with their kin (excluding children), friends and/or neighbors, and who don't, or irregularly, participate in senior citizen activities sponsored by the church, are less likely to be aware or knowledgeable about formal social services, and as a result, utilize fewer services. This group in general, tends to be younger (the young/old), in better overall health, and have higher incomes than the higher consumers of service (the old/old). It appears that living with one's spouse rather than living with kin or living alone is an important contextual factor that significantly reduces the need for and use of formal social services.

While this study indicates that the knowledge of social services is the best predictor of formal service use among the Hispanic elderly, it

would be short-sighted and erroneous to assume that the group uses available services simply because they are knowledgeable about them rather than having needs for them. For numerous reasons, which we hope future research efforts will address, it is more than likely that substantial numbers of Hispanic elderly, though in need of services, choose not to use them. This assumption seems to be warranted when one examines the Mean (average) number of services used (see Table 1):

In conclusion, the data indicate that the informal and quasi-formal, support systems take on differential levels of importance for various subgroups within the older Hispanic population. For example, among those elderly who live alone, these systems provide important avenues to the formal service sector and thus to the use of such services when needs arise. Informal/quasi support systems among this group (the old/old) seemingly serve as referral sources and complements to the formal service system. However, for those elderly who live with spouses (the young/old) informal/quasi support systems appear to be viable alternatives or substitutes for the formal service system. As a result, they appear to provide services, especially instrumental aid, that would be needed by members of this subgroup, rather than acting as a linking mechanism to the broader service sector. Thus the significance of informal/quasi social support systems as indirect determinants of service utilization, underscores their importance as sustaining forces in the lives of the Hispanic elderly.

Although the findings presented in this study support the assertion that informal and quasi-formal social support systems among the Hispanic elderly are not the best predictors of formal service use, they must be interpreted in light of the methodological limitations of the data from which the study was derived. Several problems must be corrected and resolved in future research endeavors in this area. First, conceptualization and operationalization of the concepts informal and quasi-formal support systems need to be improved

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upon. Second, efforts should be made to assess the validity and reliability of informal and quasi-formal social support indicators among different samples of Hispanic elderly as well as among the Hispanic population in general. Finally, future researchers must recognize that not only is the frequency of support important, but the types of support (i.e., instrumental and socio-emotional) and the sources of support (i.e., kin, friends, spouse, etc.) are also important dimensions of overall social support. Until the nature and degree of social support from a variety of sources are specified, and until the structure of the social support system is empirically examined, relative to the utilization of formal social services, our ability to further understand the complexities of these interrelationships will remain, rather limited.

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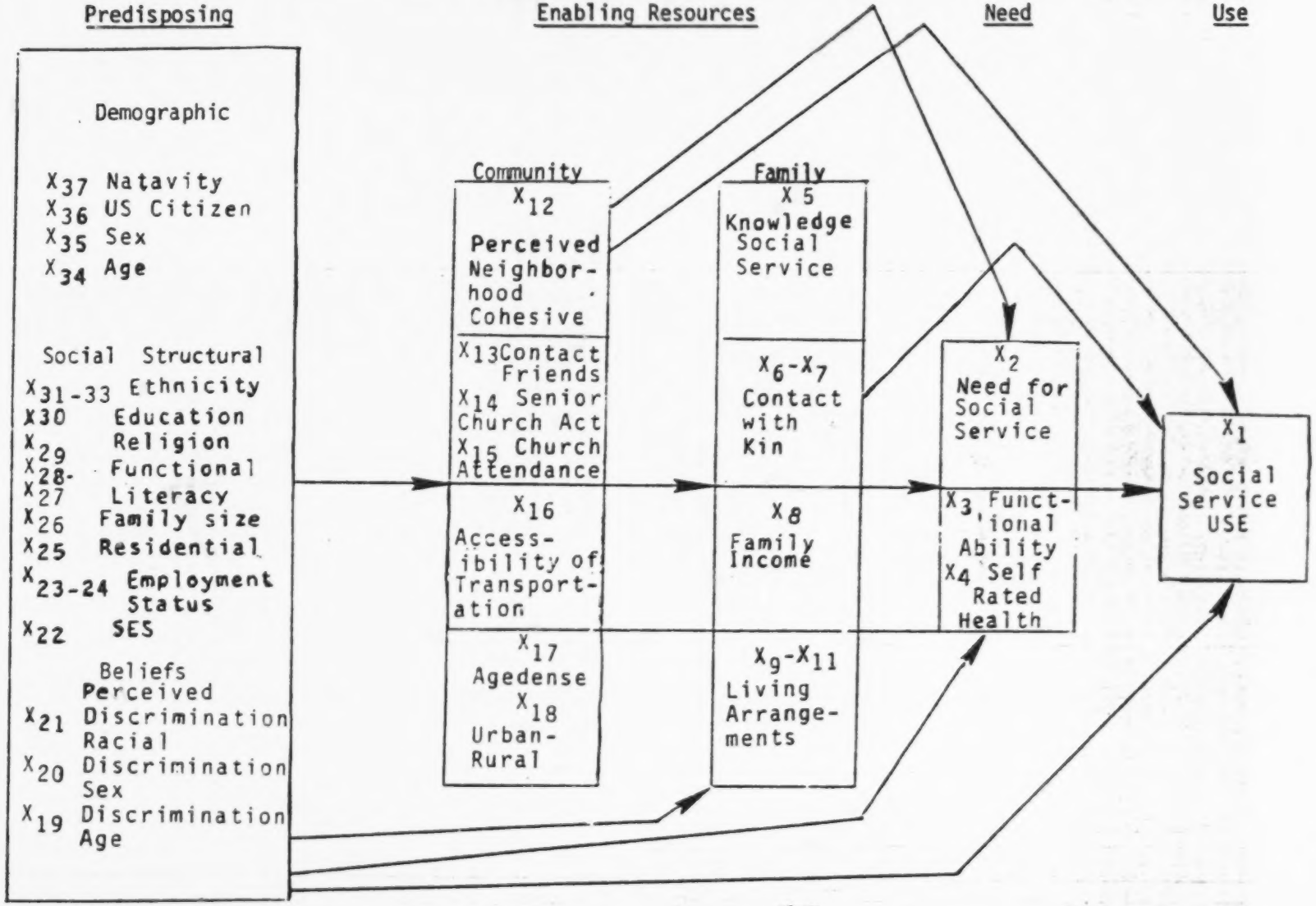
FIGURE 1

PATH MODEL TO BE TESTED



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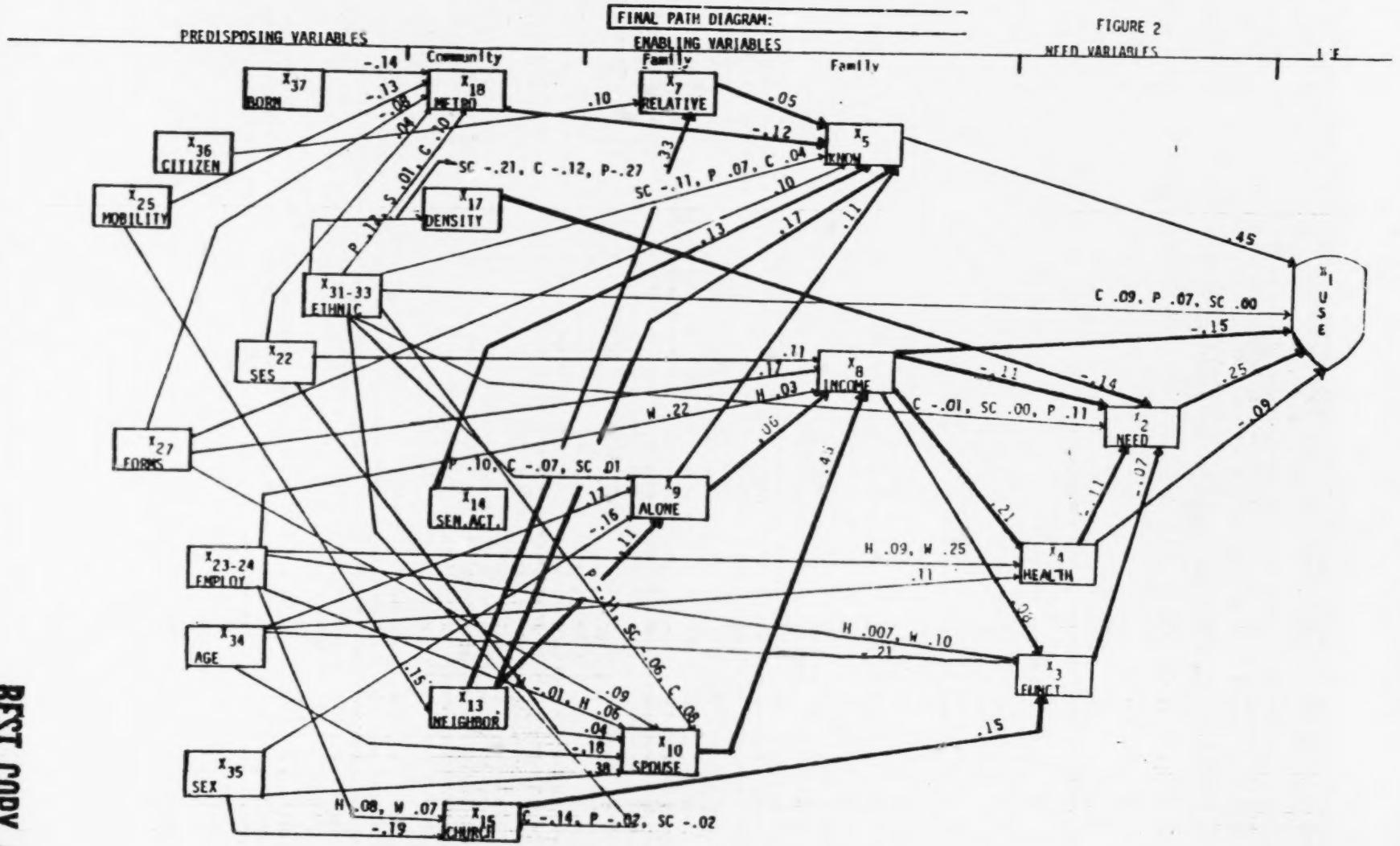

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TABLE 1

ZERO ORDER CORRELATION MATRIX

	x_1	x_2	x_3	x_4	x_5	x_6	x_7	x_8	x_9	x_{10}	x_{11}	x_{12}	x_{13}	x_{14}	x_{15}	x_{16}	x_{17}	x_{18}	x_{19}	x_{20}	x_{21}	x_{22}	x_{23}	x_{24}	x_{25}	x_{26}	x_{27}
x_1	1.00																										
x_2	0.30	1.00																									
x_3	-0.13	-0.14	1.00																								
x_4	-0.19	-0.17	0.39	1.00																							
x_5	0.46	0.01	-0.02	-0.06	1.00																						
x_6	0.04	-0.02	0.00	0.01	0.08	1.00																					
x_7	-0.03	-0.03	0.05	0.05	-0.14	0.29	1.00																				
x_8	0.22	0.14	0.16	-0.23	0.02	0.01	0.03	-1.00																			
x_9	-0.19	-0.04	0.00	0.01	-0.15	0.00	0.05	0.23	-1.00																		
x_{10}	-0.13	-0.07	-0.08	0.08	-0.09	-0.00	-0.09	0.48	-0.59	1.00																	
x_{11}	-0.14	0.00	0.01	0.00	0.12	0.04	0.05	0.04	0.44	0.09	1.00																
x_{12}	0.00	-0.01	0.01	0.01	0.07	0.03	0.08	-0.01	0.00	-0.00	-0.02	1.00															
x_{13}	0.11	0.04	0.07	0.04	0.22	0.20	0.34	-0.03	0.11	0.08	0.14	0.13	1.00														
x_{14}	0.14	0.04	0.00	0.03	0.16	0.01	0.09	0.00	-0.00	0.01	0.00	0.00	0.06	1.00													
x_{15}	0.12	0.03	-0.16	-0.10	0.01	-0.06	-0.05	-0.04	-0.03	0.03	0.03	-0.07	-0.01	0.23	1.00												
x_{16}	0.00	0.00	-0.02	-0.00	0.00	-0.03	-0.01	-0.06	-0.02	0.07	0.05	-0.04	-0.02	0.03	-0.00	1.00											
x_{17}	-0.05	-0.16	0.01	-0.03	0.07	-0.02	-0.04	-0.00	-0.02	0.00	0.03	0.06	0.03	0.05	-0.00	0.02	1.00										
x_{18}	-0.02	0.08	-0.00	-0.02	-0.15	-0.08	-0.07	0.02	-0.03	-0.04	0.05	-0.01	-0.06	0.01	0.05	-0.15	-0.10	1.00									
x_{19}	0.30	0.11	-0.01	-0.05	-0.03	-0.01	-0.00	-0.02	-0.00	0.01	-0.00	-0.06	0.00	0.03	-0.00	-0.02	-0.06	0.07	1.00								
x_{20}	0.02	0.05	0.02	-0.03	-0.00	0.03	0.01	-0.06	0.01	-0.05	0.01	-0.04	0.00	0.02	0.05	-0.02	-0.07	0.02	0.43	1.00							
x_{21}	0.00	0.10	-0.00	-0.02	-0.02	-0.00	0.02	0.02	0.00	0.02	0.00	-0.03	0.02	0.02	-0.02	-0.02	-0.06	0.07	0.55	0.34	1.00						
x_{22}	-0.38	-0.00	0.19	0.11	-0.03	0.00	-0.01	0.24	-0.06	0.15	-0.03	-0.02	-0.03	0.02	-0.02	-0.06	-0.05	0.11	0.05	0.01	0.04	1.00					
x_{23}	-0.17	-0.06	0.26	0.24	-0.09	-0.03	0.02	0.25	-0.10	0.11	0.11	-0.00	-0.03	0.02	0.04	0.01	-0.06	0.03	0.01	0.09	0.03	0.14	1.00				
x_{24}	0.00	-0.03	-0.02	-0.03	0.01	0.01	0.04	-0.18	0.03	-0.16	0.06	0.03	0.04	0.01	0.00	0.01	0.10	-0.00	-0.06	-0.00	-0.07	-0.07	-0.04	1.00			
x_{25}	-0.16	-0.11	0.16	0.17	-0.05	0.03	0.06	0.21	-0.07	0.13	-0.01	0.01	-0.00	0.04	0.00	-0.05	-0.03	0.01	-0.03	-0.00	0.01	0.10	0.21	-0.11	1.00		
x_{26}	0.02	-0.00	0.02	0.01	0.13	0.03	0.10	-0.04	0.06	-0.04	-0.00	0.01	0.15	0.03	-0.02	0.02	0.04	-0.15	0.01	0.00	0.04	-0.00	0.01	0.04	0.06	1.00	
x_{27}	0.03	0.04	-0.04	-0.04	-0.03	0.03	-0.02	0.00	-0.00	0.05	0.20	0.04	-0.00	0.04	0.03	-0.00	0.04	-0.04	-0.01	-0.02	0.00	-0.11	-0.00	0.05	-0.13	-0.02	1.00
x_{28}	-0.11	-0.13	0.11	0.14	0.15	0.06	0.12	0.20	0.00	0.14	-0.07	0.00	0.10	0.03	-0.01	-0.04	0.04	-0.19	-0.04	-0.03	0.02	0.23	0.07	-0.00	0.04	0.11	-0.06
x_{29}	-0.12	-0.12	0.09	0.13	0.04	0.05	0.12	0.24	-0.00	0.09	-0.01	0.06	0.07	0.04	-0.03	-0.04	-0.04	-0.00	0.04	0.07	0.05	0.10	0.07	-0.09	0.23	0.00	-0.01
x_{30}	-0.05	-0.04	0.00	0.01	0.02	-0.02	-0.01	0.01	0.01	0.00	-0.01	0.00	0.01	0.02	-0.04	-0.03	0.01	-0.06	-0.02	-0.01	0.00	-0.05	-0.01	0.04	-0.00	0.03	-0.00
x_{31}	0.01	-0.03	0.03	0.06	-0.10	0.02	0.02	0.03	-0.00	0.08	-0.00	-0.00	-0.04	0.00	-0.32	-0.03	-0.04	0.14	0.01	-0.02	-0.02	0.19	0.06	-0.07	0.21	-0.00	-0.13
x_{32}	0.16	0.16	-0.03	-0.05	0.10	-0.02	-0.00	-0.05	0.11	-0.11	-0.00	-0.01	0.04	0.04	-0.00	-0.04	-0.23	0.15	-0.06	0.00	0.01	0.00	-0.07	-0.02	0.01	-0.02	-0.03
x_{33}	-0.05	0.01	-0.00	0.03	-0.09	0.04	0.07	0.01	0.01	-0.05	0.02	0.03	0.07	0.01	0.04	0.02	-0.16	-0.01	-0.03	0.01	-0.01	0.00	0.00	-0.04	0.14	0.00	-0.09
x_{34}	0.10	0.01	-0.00	-0.03	0.04	0.01	-0.04	-0.25	0.16	-0.19	-0.13	-0.00	-0.03	-0.03	-0.12	-0.01	0.03	-0.02	-0.04	-0.04	-0.04	-0.06	-0.36	-0.00	-0.22	-0.04	-0.00
x_{35}	-0.24	-0.03	0.01	0.04	0.00	-0.03	-0.03	0.25	-0.15	0.36	-0.00	0.03	0.02	-0.05	-0.17	-0.02	-0.00	-0.01	0.06	-0.09	0.07	0.27	0.14	-0.13	0.57	0.03	0.07
x_{36}	0.52	-0.02	-0.00	0.01	0.17	0.02	0.14	0.06	0.09	0.01	-0.13	0.01	0.10	0.04	-0.06	-0.02	0.06	-0.10	0.01	0.00	0.01	0.02	-0.03	-0.01	0.04	0.04	0.00
x_{37}	-0.01	-0.12	0.00	0.00	0.15	0.03	0.16	0.01	0.01	0.03	-0.04	0.16	0.12	0.00	-0.06	0.03	0.19	-0.25	0.03	0.02	0.00	-0.07	0.07	0.04	0.02	0.04	0.04

x_1 • total exp
x_2 • total need
x_3 • functional ability
x_4 • health status
x_5 • total knowledge
x_6 • visited with children
x_7 • visited with relatives
x_8 • family income
x_9 • live alone
x_{10} • live with spouse
x_{11} • live with children
x_{12} • neighborhood index
x_{13} • visit with neighbor
x_{14} • participate senior activities at church
x_{15} • church attendance
x_{16} • total block from bus stop
x_{17} • age density of the area
x_{18} • metropolitan vs rural
x_{19} • age discrimination
x_{20} • sex discrimination
x_{21} • ethnic discrimination
x_{22} • social economic status
x_{23} • working vs retired
x_{24} • housewife vs retired
x_{25} • education
x_{26} • mobility
x_{27} • total children
x_{28} • difficulty farm
x_{29} • difficulty English
x_{30} • religion
x_{31} • Cuban vs Mexican American
x_{32} • Puerto Rican vs Mexican American
x_{33} • South-Central American vs Mexican American
x_{34} • Age
x_{35} • Sex
x_{36} • Citizenship
x_{37} • birth place

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$29	$25	$30	$31	$32	$33	$34	$35	$36	$37	Mean	Std Dev	Cases	Label
										1.317	1.623	1800	Total Use Of Social Service
										3.802	3.645	1798	Total Need Of Social Service
										10.302	2.273	1800	Total Functional Index
										3.349	1.017	1804	How Is Your Health Status
										4.049	3.862	1799	Total Knowledge of Social
										1.071	1.232	1508	How Many Times Visit Chile
										0.791	1.106	1804	How Many Times Visit Rela
										5.900	1.977	1764	Family Income
										0.754	0.435	1803	Lives Alone
										0.518	0.500	1805	Lives With Spouse
										0.375	0.484	1805	Lives With Children
										3.221	1.145	1653	Reasons Why People Do Not
										1.268	1.367	1803	How Many Times Visit Friend
										1.325	0.852	1804	How Often Part In Church A
										3.830	1.057	1797	How Often Go To Church
										2.884	4.778	1391	Total Blacks Fromberg Stop
										5.234	3.030	1895	
										0.057	0.349	1802	
										0.113	0.435	1803	
										0.074	0.214	1803	
										0.159	0.543	1803	
										32.898	22.355	1802	Most Performance Part Of Life
										0.279	0.448	1805	Employment Status
										0.236	0.425	1805	Employment Status
										9.020	3.909	1802	Last Year of School Completed
										0.265	0.712	1793	
										4.381	2.548	1675	Total Number of Children
1.00										1.852	0.882	1803	How Difficult Are English
0.85	1.00									1.922	1.234	1805	How Often Speak English
0.00	-0.05	1.00								0.878	0.329	1805	Religious Affiliation
0.12	-0.15	-0.06	1.00							0.116	0.320	1805	What Is Your Ethnic Origin
0.01	-0.07	-0.07	-0.14	1.00						0.130	0.336	1805	What Is Your Ethnic Origin
0.07	0.11	-0.62	-0.12	-0.13	1.00					0.110	0.313	1805	What Is Your Ethnic Origin
0.15	-0.13	-0.00	0.00	-0.06	0.00	1.00				44.536	0.650	1805	Age of Respondent
0.09	0.06	-0.00	-0.05	-0.00	0.00	0.00	1.00			0.466	0.500	1805	Sex of Respondent
0.39	0.34	0.02	-0.27	0.27	-0.09	-0.07	0.00	1.00		0.854	0.476	1805	Respondent US Citizen
0.35	0.38	0.04	-0.24	-0.30	-0.02	-0.12	0.02	0.48	1.00	0.404	0.491	1805	Where Respondent Born

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